



Office of Research and Development
National Health and Environmental Effects Research Laboratory
Mid-Continent Ecology Division (MED)

MARK STEVEN PEARSON

U.S. Environmental Protection Agency
National Health and Environmental Effects Research Laboratory
Mid-Continent Ecology Division - Duluth
6201 Congdon Boulevard
Duluth, Minnesota 55804
218-529-5205
pearson.mark@epa.gov

(revised 04/11/02)

EDUCATION

<u>Degree</u>	<u>Year</u>	<u>Major</u>	<u>Institution</u>
M.S.	2000	Biological Sciences	Wichita State University
B.S.	1994	Fishery Biology	Colorado State University

EXPERIENCE

Aquatic Biologist

<u>Dates</u>	<u>Employer</u>
10/00 - Present	U.S. EPA 6201 Congdon Blvd. Duluth, MN

Brief Description of Position: Conduct research for development of diagnostic tools to determine the causes and sources of stressors in aquatic ecosystems (wetlands, rivers, lakes). Special emphasis on benthic ecology and food web disturbances using stable isotopic methods. Responsible to lead and conduct field research throughout the Great Lakes area using a variety of field equipment and boats. Responsible for laboratory analyses of chlorophyll A and other biological endpoints. Assist with the planning, designing, and implementation of future research strategies for EPA-MED.

Environmental Scientist

<u>Dates</u>	<u>Employer</u>
06/99 - 10/00	Utah Dept. of Environmental Quality Division of Water Quality

Brief Description of Position: Developed TMDLs and watershed management plans for the West Colorado River and Sevier River basin in the state of Utah. Assisted in developing methods to biologically monitor the effects of nutrients and suspended solids for the State of Utah.

Graduate Research Assistant

<u>Dates</u>	<u>Employer</u>
08/97 - 06/99	Wichita State University Biological Sciences Dept. Wichita, KS

Brief Description of Position: Conducted toxicokinetic research to study methods of reducing heavy metal bioaccumulation of mine-contaminated soils to earthworm. Taught laboratory sections of Ecotoxicology, Ecology, Cell, Biology, and Organismal Biology.

Research Associate

<u>Dates</u>	<u>Employer</u>
10/94 - 08/97	Colorado State University Dept. of Fishery and Wildlife Biology Ft. Collins, CO

Brief Description of Position: Responsible for research at the Rocky Mountain Arsenal dealing with fate and effects of contaminated sediments (sediment quality triad). Duties included: enumeration and identification of invertebrate samples; fish and zooplankton population sampling (electrofishing, gill nets, mini-fyke nets, and quantitative zooplankton nets); performed all phases of aqueous and sediment toxicity testing; maintained organism cultures; supervised undergraduate work-study students; responsible for analyzing, interpreting, and reporting data from this research.

Research Assistant

<u>Dates</u>	<u>Employer</u>
09/94 - 08/97	Colorado State University Dept. of Fishery and Wildlife Biology Ft. Collins, CO

Brief Description of Position: Responsible for acute and chronic toxicity testing of contaminated sediments and waters and biomonitoring studies in the upper Arkansas River, CO. Duties included: maintained *Chironomus tentans*, *Ceriodaphnia dubia* and *Selenastrum capricornutum* cultures; collection of water samples and analysis for physicochemical parameters; atomic absorption spectrophotometry analysis for heavy metals in sediments, overlying waters, and invertebrate and fish tissue; supervised work-study students and assisted graduate students with laboratory and field research.

Laboratory Technician I

<u>Dates</u>	<u>Employer</u>
08/92 - 12/94	ENSR Consulting and Engineering Fort Collins, CO

Brief Description of Position: Responsible for all phases of aquatic biomonitoring. Duties included: mixing of reconstituted waters, calibration of meters, water chemistry characterizations; care and maintenance of *P. promelas* and *O. mykiss* fish cultures. Perform toxicity tests with fish and invertebrates.

PROFESSIONAL SOCIETIES

North American Benthological Society

PUBLICATIONS

Peer-Reviewed Journals

Pearson, M.S., K. Maenpaa, G.M. Pierzynski, and M.J. Lydy. 2000. Effects of soil amendments on bioavailability of lead, zinc, and cadmium to earthworms. *J. Environ. Qual.* 29:1611-1617.

FIRST AUTHOR ABSTRACTS

1994 - Effects of Sediment Bioturbation by *Chironomus tentans* on Toxicity of Heavy Metals to *Ceriodaphnia dubia*. Symposium on Ecological Research at Colorado State University. Award for the best undergraduate poster presentation.

1994 - Effects of Sediment Bioturbation by *Chironomus tentans* on Toxicity of Heavy Metals to *Ceriodaphnia dubia*. Annual Meeting of the Society of Environmental Toxicology and Chemistry, Denver, CO.

1995 - Assessment of Sediments in Lakes at the Rocky Mountain Arsenal Using the Sediment Quality Triad. Annual Meeting of the Society of Environmental Toxicology and Chemistry, Vancouver, B.C.

1996 - The Use of Benthic Macroinvertebrates to Assess Toxicity of Contaminated Sediments in Three Lakes at the Rocky Mountain Arsenal, CO. Annual Meeting of the North American Benthological Society, Kalispell, MT.

1998 - Determining Bioavailability of Heavy Metal Contaminated Soils With and Without Phosphorus Amendments Using a Toxicokinetic Approach. Annual Meeting of the South Central Chapter of the Society of Environmental Toxicology and Chemistry, Wichita, KS.

1998 - Determining Bioavailability of Heavy Metal Contaminated Soils With Phosphorus and Organic Matter Amendments Using a Toxicokinetic Approach. Annual Meeting of the Society of Environmental Toxicology and Chemistry, Charlotte, NC.